

ABSTRACT

A drive axle assembly for an all-wheel drive vehicle includes an adaptively controlled first hydraulic coupling for providing front-to-rear torque transfer control to a first wheel and an adaptively controlled second hydraulic coupling for providing front-to-rear torque control to a second wheel. The drive axle assembly is contained with a common housing and communicates with a traction control system to actively control actuation of the first and second hydraulic couplings based on the operating characteristics of the vehicle as detected by suitable sensors.